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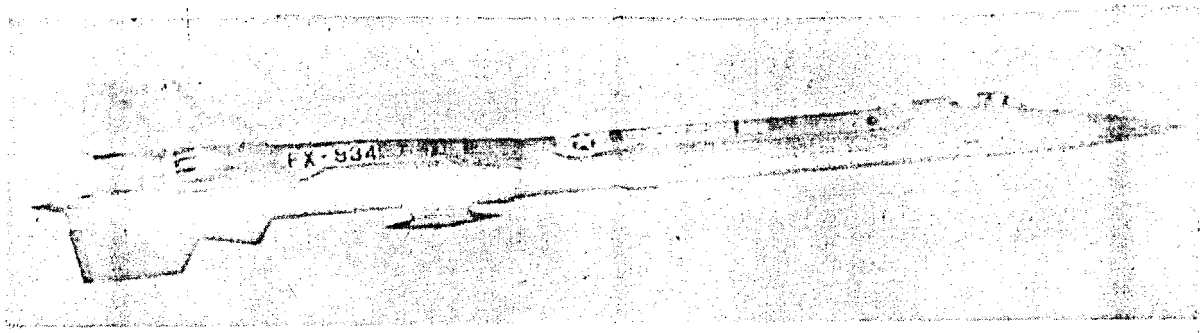
# THE NATION

## AVIATION

### Take-Off to the Future

The President of the U.S. had some electrifying news. With an air of quiet pride, he announced that the U.S. had secretly developed and successfully tested an aircraft that is far in advance of any ever seen before. Called the A-11, the sleek, razor-winged interceptor flies higher and faster than any jet aircraft in history, promises a major breakthrough toward the futuristic world of flight at more than three times the speed of sound.




A-11 JET INTERCEPTOR
*Out of the "Skunk Works," at three times the speed of sound.*

Though deliberately sketchy in disclosing details about the plane's capabilities at his press conference last weekend, Lyndon Johnson did say that it has already been tested from Edwards Air Force Base, Calif., "in sustained flight at more than 2,000 miles an hour and at altitudes in excess of 70,000 ft." It boasts a range of "thousands of miles." Until now the all-round, highest-performance aircraft in the U.S. has been the Navy's F-4B (Phantom II), which flies at a top speed of 1,650 m.p.h., and at altitudes up to 98,000 ft. Aerodynamicists who have studied the configuration of the new, missile-like A-11, agree that its design may well make it capable of speeds of Mach 5 (more than 4,000 miles per hour) at altitudes of more than 100,000 ft.

What makes the A-11 even more amazing is the fact that in a world of production-line design, it is the brain child of one man: Vice President Clarence ("Kelly") Johnson, the same Lockheed Aircraft Corp. engineer who designed the famed, high-altitude U-2 ten years ago. Under orders from the Eisenhower Administration in 1959, Kelly Johnson and his team got busy in the "Skunk Works"—a secret hangar area at Lockheed's Burbank, Calif., plant where U-2 plans also took shape. The first A-11 took to the air last fall.

The A-11 is powered by a pair of new J-58 jet engines, developed by Pratt & Whitney Aircraft Co. over the past eight years. But its real secret lies in the metal of which it is largely made: titanium, which can withstand the searing heat that is generated in flight at many times the speed of sound. Titanium had long resisted the best efforts of engineers to fabricate it as the major metal in any aircraft.

For months, U.S. planemakers, watching the development of the British-French, Mach 2 airliner called Concorde, have worried that the U.S. was falling behind in the field of supersonic flight. Now, with the development of the A-11, the U.S., instead, has reached a critical take-off ahead of the rest of the world. In so doing, it may well have revolutionized manned aircraft.